

-casting the steel in the form of a slab,
-hot-rolling the slab at a temperature above Ar3 to obtain a strip of hot-rolled sheet,
-coiling the hot-rolled sheet,
-cold-rolling the hot-rolled sheet into the form of an intermediate cold-rolled sheet,
continuously annealing the intermediate cold-rolled sheet at a temperature between 640°C and 670°C,

rerolling the intermediate cold-rolled sheet down to a final sheet thickness for drawing,

wherein said hot-rolled sheet is coiled at a temperature between greater than 530°C to 570°C, and wherein said process provides a sheet of ultra-low-carbon steel comprising at most 0.001% titanium and at most 0.001% niobium and having a Lankford coefficient r_{aver} greater than 1.6.

10. (Amended) Process according to Claim 8, wherein the steel comprises at most 0.001% titanium by weight and at most 0.001% niobium by weight and wherein the cold-rolled sheet is annealed at a temperature 640°C and 670°C for a time of less than 3 minutes.

11. (Amended) Process according to Claim 9, wherein the hot-rolled sheet has a thickness of about 3 mm, the hot-rolled sheet is cold rolled with a reduction ratio of 90 to 93%, the intermediate cold-rolled sheet is continuously annealed at a temperature of 670°C for a time of about thirty seconds and, after annealing, the intermediate sheet is rerolled in a skin-pass rolling mill with a reduction ratio of between 2.5 and 17%.

14. (Amended) A thin sheet of ultra-low-carbon steel made by the process of Claim 8 comprising, by weight, between 0.10 and 0.35% manganese, less than 0.006% nitrogen, less than 0.025% phosphorus, less than 0.020% sulphur, less than 0.020% silicon, a total amount of the elements copper, nickel and chromium of at most 0.08%, at most 0.006%

C3 carbon and at most 0.010% aluminum, iron and inevitable impurities, wherein it has a homogeneous structure with equiaxed grains, a Lankford coefficient (r_{aver}) greater than 1.6 and a plane anisotropy coefficient (ΔC) close to 0, and wherein said sheet comprises at most 0.001% titanium and 0.001% niobium.

C4 20. (Amended) Process for producing a thin sheet of ultra-low-carbon steel, said process comprising:

-producing a killed and vacuum-degassed steel comprising, by weight, between 0.10 and 0.35% manganese, less than 0.006% nitrogen, less than 0.025% phosphorus, less than 0.020% sulphur, less than 0.020% silicon, a total amount of the elements copper, nickel and chromium of at most 0.08%, at most 0.006% carbon and at most 0.010% aluminum, iron and inevitable impurities,

-casting the steel in the form of a slab,

-hot-rolling the slab at a temperature above A_{r3} to obtain a strip of hot-rolled sheet,

-coiling the hot-rolled sheet,

-cold-rolling the hot-rolled sheet into the form of an intermediate cold-rolled sheet,

continuously annealing the intermediate cold-rolled sheet at a temperature between 640°C and 670°C,

rerolling the intermediate cold-rolled sheet down to a final sheet thickness for drawing,

wherein said hot-rolled sheet is coiled at a temperature between greater than 530°C to

570°C, and wherein said process provides a sheet of ultra-low-carbon steel comprising at

most 0.001% titanium and at most 0.001% niobium and having a Lankford coefficient r_{aver} greater than 1.6.